

# Designing for Impact IV: Workshop on Building the National Network for Manufacturing Innovation

ADVANCED MANUFACTURING NATIONAL PROGRAM OFFICE

## **Dialogue 2 Backgrounder:**

### Summary of Input Offered at Prior Designing for Impact Workshops

#### **Institute Structure and Governance**

#### 1. What business models would be effective for the Institutes to manage business decisions?

A number of models were suggested, notably the Fraunhofer-Gesellschaft model, non-profit associations [501(c)(3) or (6)] Sematech, the National Science Foundation Engineering Research Centers, EWI, and national laboratories like Sandia and Oak Ridge. It was suggested that the Institutes remain flexible, not prescriptive, in developing business models. The business model will need to evolve during transition from federal funds to private sector funding.

#### 2. What governance models would be effective for the Institutes to manage governance decisions?

Institutes can take many forms, with different management structures and membership rules. The business models that were suggested included the type normally used by business (a Board of Directors with a CEO that reports to the board, perhaps including a private sector advisory board), as well as referring to existing models as examples of effective structures (Fraunhofer, Sematech, NSF Engineering Research Centers, Edison Welding Institute). A holacracy model was also suggested. The vision of a National Network of Institutes can be promoted by forming a council of IMI directors to share best practices.

# 3. What membership and participation structure would be effective for the Institutes, such as financial and intellectual property obligations, access and licensing?

Regardless of the structure, the Institute should have certain characteristics. It has been suggested that there should be a low barrier for entry for all stakeholders, and a fee for services should be considered. Participation structures could be modeled after Fraunhofer or I/UCRCs, etc. The treatment of intellectual property has had a number of suggestions, including the pooling of IP, where the institute controls maturation and licensing and perhaps with limited licenses granted to all Institute members. Alternatively, the Institute could follow an "inventors owned" model, where IP and licensing rights are shared by the contributors to the project.

#### 4. How should a network of Institutes optimally operate?

The network should be flexible, growth-oriented, and responsive to changing needs in industry. The Institutes should adopt consistent contractual vehicles, forms, and guidelines to establish trust with multiple institutes. Institutes should share pre-competitive information and research results with one another and with the public. This could be done through an annual conference, annual technology showcase, and via the website. Members could also form self-assembled teams to work on proprietary projects.

#### 5. What measures could assess effectiveness of Network structure and governance?

The effectiveness of the Network structure could be assessed by tracking the number of member companies, technology transfer successes, venture capital raised, and new IP. Other measures of assessment include surveys of stakeholders; the number of projects completed and time required; and the number of new and retained manufacturing jobs.